

Calculus Warm Up #3-4

$\frac{dy}{dx} = \frac{3-x}{y}$ Let $y = f(x)$ be the particular solution to the differential equation for $1 < x < 5$.

The line $y = -2$ is tangent to the graph of f .

Find the x -coordinate of the point of tangency and determine if that point is a local minimum, maximum or neither.

Last night's HW was long and carries over for tonight!

Questions on it will be answered tomorrow.



Week 3 Classwork

Staple up for tomorrow:

Warm up on top

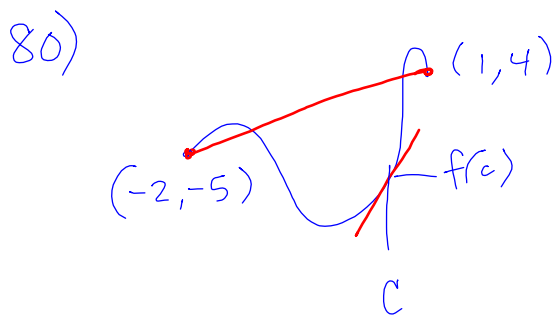
Green FR 2010



Questions MC B:

$$77) \int_{-3}^3 f(x) dx + \int_{-3}^3 1 dx$$

$$x \Big]_{-3}^3$$



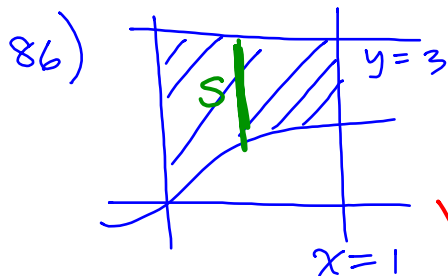
$$83) \quad \frac{1}{3-0} \int_0^3 v(t) dt$$

$$84) \quad 350 - \int_0^5 (-110e^{-0.4t}) dt$$

82) change in altitude
(accumulated change) $\int r(t) dt$

altitude decreases
when $r(t)$ is -

graph $r(t)$ &
calculate zeros.



$$S = 3 - \tan^{-1} x$$

$$V = \int_0^1 (3 - \tan^{-1} x)^2 dx$$

87) Graph $f' \rightarrow$ PI of f where $f''=0$
or at extrema of f'

91) $v(t) = \int \ln(1+2^t) dt$

$$v(2) = v(1) + \int_1^2 \ln(1+2^t) dt$$

calculate.

Classwork:

2002 FR # 1 - 3 (Purple)

Will carry over into next week.

HW: Finish up
p. 591, # 1 - 33 odd